

ON ETHNOGRAPHY

Approaches to Language and Literacy Research

(An NCRLL Volume)



Shirley Brice Heath
and

Brian V. Street

with Molly Mills



Teachers College
Columbia University
New York and London

NCRLL

National Conference on Research
in Language and Literacy

Contents

| | |
|--|----|
| From the NCRL Editors | ix |
| Acknowledgments and an Opening for Conversation | xi |
| 1. Language, Culture, and Learning: Ethnographic Approaches | 1 |
| Languages and Literacies in Symbolic Structure | 4 |
| Culture as a Verb | 7 |
| Learning Across Recurring Situations | 10 |
| Multimodalities | 21 |
| Summary | 24 |
| Notes | 25 |
| 2. The Ethnographer's Field Entry and Tools of Practice | 27 |
| Entering the Field: Shirley Goes to Trackton and Roadville | 29 |
| The Constant Comparative | 32 |
| Co-Occurrences for Pattern Detection: Shirley Figures Out How Skateboarders Tell Time | 38 |
| Resisting Preconceptions | 42 |
| Reliability, Replicability, and Validities | 44 |
| Summary | 47 |
| 3. Setting Decision Rules for Fieldwork | 48 |
| Literature Reviews: The Company We Keep | 49 |
| "What Really Happens Here?" | 55 |
| The Ethnographer as Instrument | 57 |
| Setting Time Frames | 60 |
| Determining the Space as "Sample" or "Case" | 63 |
| Summary | 66 |

CHAPTER 1

Language, Culture, and Learning: Ethnographic Approaches

Humans, more than any other species, spend their time producing symbolic structure for one another. We are very good at coordinating with the regularities in the patterns of symbolic structure that we present to one another. (Hutchins, 1995, p. 370)

Roger is a young man who juggles. He juggles for fun, relaxation, and challenge. He entertains his family and friends. Strangers walking along the street stop to watch him and ask how he learned to juggle. Roger does not mind talking about how he learned to juggle and what juggling means to him. He even talks to ethnographers who are curious about how individuals voluntarily take on complex learning challenges. Molly Mills is such an ethnographer.¹ When she asks Roger about how he started as a juggler, he muses:

"Actually, when I started learning to juggle, I was just taught by a friend in the very beginning. It was very much like book-learning: It was almost as if you had taken a class. I could always juggle two balls in one hand like that [Roger demonstrates] because there is no pattern to it. It's just immediately obvious."

"I was in the 6th grade, and I'd just practice constantly, because I just thought it was the coolest thing ever."

"I think [I] soon learned, just by trial and error, that if [I] threw it up higher, [I] would have more time to catch the ball, which would be easier, but [my] throws would be a little less accurate."

"It's all about practice, trial and error; [I've] got to see what stuff worked and what didn't and then muscle memory."

"After maybe an hour, I could get on it well, standing with a wall next to me."

"I'd remember jugglers I'd seen; I'd see jugglers on TV or something; then I'd try to emulate the really easy patterns."

"[I] knew what it felt like, and [I'd] try to emulate that again."

When we as ethnographers study language and literacy, we are a lot like Roger.

We think it's cool, we read books, we find ways to practice. And we have to admit to the power of trial and error, focus on remembering how others learn to be ethnographers, and try out patterns we hope we can emulate.

Molly Mills is an ethnographer who did all this. She found out that anyone who wants to learn to juggle has to do all that Roger does. She also found out that ethnographers who study language, culture, and learning face special difficulties. They have to figure out how human beings "coordinate with the regularities in the patterns of symbolic structure" in some of the same ways that Roger learns juggling.

Throughout this volume, as we talk about ethnography in the study of language and literacy, we often return to metaphors that surround juggling. We see learning ethnography as being a lot like learning to juggle. Both call for practice, close observation, and the challenge of having to manage more and more balls in the air. Both involve figuring out and hanging onto definitions, principles of operation, and motivational incentives. Both are about constant learning. Both depend on observing, comparing, reflecting, assessing, and coming to "feel" certain stages of achievement in knowledge and skill that do not easily translate into words. Both make use of various means and modes in different combinations at various stages of learning. Finally, both engage learners in figuring out

many multiples that go beyond any single moment of insight, step toward expertise, or sense of disappointment.

Here, in place of a perhaps expected definition of ethnography, we jump right into what ethnographers who read this book will have as their central research focus—language and multimodal literacies. We go then first to the object rather than to the method of study, because we believe that we all have to know that we want to learn before someone else tells us how to learn. Furthermore, as you will see, our view of ethnography becomes increasingly evident and even definable as chapters of this book unfold. In the end, you will determine your own. But if you are someone who wants methods first and theoretical distinctions later, then skip Chapter 1 for now, go directly to Chapters 2 through 5, and then read Chapters 1 and 6.

Figuring out what language, culture, and learning can be for ethnographers takes us head-first into *culture*.² As we study how humans go about producing "symbolic structure for one another," we see immense variability as well as stability in the ways they create, sustain, and adapt their modalities, including oral and written language. In this volume, we consider only three of the many situations of learning that ethnographers studying language and literacy enter:

1. Individuals striving to become expert in something
2. Groups in identity-making
3. Institutions of formal education

As we travel through illustrations of these three contextual frames, we do need definitions, and we will provide them. We start with some of the conceptual balls that ethnographers who do research on language and multimodal literacies have to juggle.

LANGUAGES AND LITERACIES IN SYMBOLIC STRUCTURE

We take the term *language* to mean any symbol system whose grammar provides phonological, morphological, syntactic, and lexical structures and rules. *Grammar* for linguists amounts to the large-scale system of patterning of units of sound, categories of meaning (e.g., plurality, gender, etc.), and arrangements of units of meaning (e.g., prefixes, suffixes, and roots) that constitute spoken language. Only a fraction of the 6,900 or so languages spoken in the world have writing systems, and few of these appear in a significant amount of printed material (see http://www.ethnologue.com/ethno_docs/distribution.asp?by=country [accessed December 19, 2007]).

Though the word *literacies* shows up everywhere today, we use the simple singular term *literacy* to refer only to written representations of oral (or gestural) language rendered in some script system that carries its own conventions and rules of usage.

In contrast, when we use the term *multimodal literacies*, we mean systems of representation that include written forms that are combined with oral, visual, or gestural modes. Think, for example, of musical scores, choreographic notational systems, computer programming languages, or the script with director's notes for a dramatic performance in American or British Sign Language.

We also recognize *multimodalities*, such as the stance and hand signals of traffic police that drivers "read" and act upon accordingly. Written language has no saliency in this event at this moment, though during their training, police learn from materials in which visual illustrations appear along with printed text.

This is a good place to introduce yet another definitional distinction we use—that between *organizations* and *institutions*. The former appear and disappear, primarily to meet contemporary and often short-lived specialized needs of societies. Though regulated by governmental systems in some cases, organizations have no official State function. Organizations include entities as varied as Girl Scouts and Boy Scouts, corporations, self-help

groups, artists' cooperatives, and trade guilds. Institutions, on the other hand, persist, and much of their effort goes into sustaining themselves to meet the lasting needs of their societies. Their functions and purposes do not go away. Governments or state systems, religions, families, formal education systems, and judicial systems affect the lives of all human beings. Though dissent, fragmentation, and dissolution of one kind or another take place within institutions, they remain. Ethnographers benefit from awareness of the origins and purposes of institutions and organizations before they start to probe the consequent differences in their means of sustaining themselves. For example, many community youth groups as organizations have freedoms of time, space, activity, and authority that schools as institutions seldom provide. To do so could alter their fundamental norms of standardization necessary to assure society of their predictability into perpetuity.

Today's scholars who do their research in nations with one dominant national language have to keep in mind not only multimodal literacies but also *multiple languages*. In most nations of the world, learning at least two, and often several, languages before the age of 5 is the norm. From award-winning motion pictures to multinational business call centers, the contemporary world reflects *multilingualism*. Speakers of several languages often have different levels of competency and comfort in reading and writing the languages they speak and understand. For example, children in South African villages often understand and speak as many as five languages before they go to school; when they enter school, they usually learn to read and write in only two of these—English plus the dominant regional language. Today, leaders of the European Union must speak (at least) three languages, though they may not read and write all three with equal ease. Seeing multilingualism as the norm is common among political, educational, and business leaders in India, Indonesia, and many nations of Africa and the Pacific. Multilingualism is likely to be a daily reality in the lives of students around the world, making this phenomenon increasingly significant for definitions and methods used in the

teaching of English language and literature around the world (cf. Ellis, Fox, & Street, 2007).

Added to the multiples of languages and literacies that ethnographers encounter in any single setting is the challenge of recording how these work hand in hand with cultural patterns. From pronouncing vowels to shaping stories, every speaker reflects habits, loyalties, and ideologies of language forged in cultural patterns that existed before they were born. From the moment an infant emerges from the womb until death, these cultural patterns, shifting and cumulative as they are, provide the bases through which every human creates, explores, sustains, and tests social relationships while developing a sense of agency.

Talking, gesturing, and waving artifacts about in locally acceptable patterns make up the glue for conversation in all human groups. But these patterns vary across languages and societies, and they change also for individuals as they mature and gain experience with different audiences, settings, and purposes. Institutions and organizations develop their own norms and genres of interactive oral and written exchange, and success in adopting these can mean the difference between membership and exclusion for individuals. The cultural patterning of interaction shapes identities and roles that then provide access and opportunities for learners. From individuals to institutions, shifts in these patterns mean constant learning. Entire fields of study, such as organizational learning or school reform, as well as more familiar fields such as human development, look at language as central to adaptive learning across the individual life span as well as within organizational and institutional trajectories.

Ethnographers face perhaps their greatest challenge as they try to understand how cultural patterns support, deny, and change structures and uses of language and multimodal literacies. Perhaps no anthropologist or educator has done more to point out the importance of this challenge than Dell Hymes. The originator of the idea of *ethnography of communication*, Hymes provided leadership through his own long-term

fieldwork among Native Americans of the Northwest as well as his provocative writings on the embeddedness of language in ideology, socialization, and identity (Hymes, 1962, 1964a, 1964b, 1974, 1994, 1996). Hymes and others in linguistic anthropology (see Duranti, 2001, for an overview of this work) demonstrate that bringing ethnography to symbol structuring means not only describing what is currently happening at the local level but also documenting how organizational and institutional forces select and shape their preferred cultural patterns and imbue them with particular values (Leung, 2005).

CULTURE AS A VERB

Anthropologists have long debated the meaning of the term *culture*. By the end of the 20th century, many had pointed out the neocolonial, racist, and nationalist overtones of the term. (See Chapter 6 for the history of ethnography leading up to the era of post-colonial studies.) Meanwhile, scholars from other fields (e.g., business, medicine, and sports) adopted the term “culture,” taking it to be almost synonymous with “ambience,” “climate,” or “spirit.” Social constructivists and some anthropologists (including Brian and Shirley) pushed hard for the idea that culture never just “is,” but instead “does” (Thorn-ton, 1988, p. 26). Street (1993b) proposed that we think of culture as a verb rather than as a noun—a fixed thing. Ethnographers who adopted this idea took culture to be unbounded, kaleidoscopic, and dynamic.

In their studies of ever-shifting active processes of meaning-making in situations, ethnographers search for interconnected patterns (see Shuman, 1986, for an illustration of this principle in a study of secondary students in and out of school). In their focused observation and participation within a chosen physical location or an identifiable social group, ethnographers adopting the culture-as-verb idea take as axiomatic the following principles as they think ahead to their field studies of language and multimodal literacies.

1. Gradations of change in habits and beliefs (though seemingly minor on the surface) correlate with shifts in structures and uses of language and multimodal literacies.
2. Singular or "essential" meanings or explanations that come in authoritative or institutionally grounded terms must be open to scrutiny in historical and operational frames.
3. The same goes for discourse forms and illustrative materials that stick out or are formalized, authorized, named, and valorized (especially through state-sanctioned and -supported institutions or commercial interests).
4. Insiders or locals use tacit meaning-making processes that they take for granted, and their explanations of these often bear little relationship to realities of usage. They may be expressing *ideals* of behavior rather than *manifest*, or actual, behavior.
5. The norm in (almost) all contexts is that we coordinate the regularities of patterns of several systems of symbolic structure at the same time.

Already you see that the complexities of this kind of juggling will not be easy. It is heavily conceptual, requires accuracy, and begs for models to emulate.

Widespread public usage of the nouns "a culture" or "cultures" makes the ethnographer's work especially difficult. Nouns such as these lead people to believe in fixed boundaries around things and events as well as beliefs and values. Phrases or terms such as "my culture," as distinct from "your culture," or cultures subsumed within the term "multicultural," accentuate differences and borders.

The fact is that the work of ethnographers shows again and again that groups that see themselves as vastly different from their neighboring groups actually share many habits and patterns of behavior. Yet the *meta-narratives* or stories they tell in order to give reasons for their particular history or cultural patterns may differ greatly. Meta-narratives answer questions that ask "why do we do this and not that?" Groups use these stories (many of which show up in literature, rhymes, and lul-

labies for children) to keep up the idea of their own unique identity.

We generally associate "culture" with one or more "societies," often seen as synonymous with "nation," "racial group," "religion," or "ethnicity." Yet these biological and geographic frames of birth origin or chosen affinity also develop subgroupings that have a strong sense of their own special ways of doing and believing. For example, members of every nation, though held together within national boundaries, will vary along a spectrum of differences that result from their history of migration, group isolation, geographic locale, religious affiliation, and other internal or external forces. Think, for example, of the vast differences of language and social grouping reflected in contemporary Mexico, Canada, South Africa, Indonesia, or the Philippines. Racial labeling changes not only under different governments but also from evolving preferences for self-naming by the groups themselves. Think of the changing history of power within labels such as *Negro*, *African*, *African American* (with and without a hyphen), *Black*, or *Afro-Caribbean*, and the role that individuals identified by these labels played in bringing particular terms to public acceptance and usage.

Institutions as well as organizations that carry no inherent ties to place of origin also develop core cultural patterns and meta-narratives about their "culture." Institutions of formal education pride themselves on their particular "culture" and use their distinctiveness in promotion and recruitment.

Organizations do the same. Consider, for example, portrayals of "the Hewlett Packard way" on the pages of business magazines at the end of the 20th century or the notion that certain sports (never mind particular teams, such as the Boston Red Sox, Manchester United, or Real Madrid) develop identifiable "cultures." In popular uses of the term "culture," the underlying generally unspecified referent is a core of complexly intertwined symbols, habits, and beliefs generally selected not on a descriptive basis but as prescriptive norms. Corporate groups, sports teams, and other organizations consciously build and

promote their own “culture” for public relations purposes. Insiders or old-timers often judge newcomers by the extent to which they adopt certain key values or behaviors identified with “our culture.” Failure to act as a member in “good” cultural standing can, and often does, lead to ostracism or expulsion. The notion of “communities of practice” attempts to build on these ideas, especially in the context of business enterprise (Wenger, 1998; but cf. Barton and Tusting, 2005, for a perspective more in tune with the account we provide here of cultural processes and their relation to language and power).

Complexes of cultural habits and beliefs change for institutions and organizations as well as social groups. Some of these changes take place in the open while others go on behind the scenes or without participants’ awareness. Stimulating such changes in almost every circumstance are pressures and forces—social, political, and economic—from outside the group. Powerful individual personalities can also shift the sense of cultural identity or potential of such groups.

Ethnographers face loose and varying popularized definitions of “culture” in every setting. As they sort out and describe what actually happens as well as what locals and outsiders believe is happening or happened in the past, they keep culture as a verb. Narratives, logos, slogans, and codified sets of instructions, as well as written histories and accounts by outsiders or dissidents, together help reveal the web of meanings that build and shift as people use language and multimodal literacies.

LEARNING ACROSS RECURRING SITUATIONS

Historically, studies that take *culture* as a noun also take language to be both model and vehicle of cultural processes that surround learning. As model, language is taken as our primary representation of cultural knowledge. As vehicle, language is considered the means by which we transmit what we know and think. Neither conveys the integrative complexities of language in interplay with culture and, most especially, with our ways of knowing and learning.

As ethnographers come to understand culture as a verb, they recognize that the vast majority of what and how humans learn never goes into language as either model or vehicle. Think of the play of infants and toddlers, for example. Speakers and users of language and multimodal literacies generally find it difficult to think analytically about what they know and do. Much that we learn as members of our different cultural entities will not fit easily into any set of symbols, no matter how complex the arrangement. Knowledge that comes in patterned symbolic structure works in constant interdependence with context, emotion, embodiment, and many other aspects of being human. Sorting out as many connections of language and culture as possible across recurring and definable situations constitutes the ethnographer’s job.

To illustrate such connections, we lay out three situations that come up again and again across the life span. These represent only a small selection of the slices of life in which ethnographers can locate their studies of learning, but they are selected as particularly appropriate for those adopting an ethnographic perspective on language and literacy. We look at individuals setting their own goals toward expertise; groups building their identities; and formal education institutions transmitting prescribed values, skills, and bodies of information.

As humans mature biologically and neurologically, everyday behaviors (such as walking) take place without representation by symbol systems. But actions and communications that reflect meaning recur throughout the course of life and lend themselves to study through the primary tools of collecting and analyzing data that ethnographers use.

Individuals in Expertise Achievement

The first of these recurring situations involves individuals who set out to become expert in one particular area of achievement. We focus on situations in which individuals voluntarily work toward getting better at one or another complex set of skills. Like Roger the juggler, they learn by observing, experimenting, practicing, and self-assessing; they may

also seek direct instruction. A young person wants to learn to unicycle. A gamer wants to improve skills in an occasional after-work pastime. A retiree takes up woodworking and becomes expert in making a special design of salad bowl.

Individuals who voluntarily pursue special roles or forms of expertise use "practical intelligence." Psychologist Robert Sternberg and colleagues study managers and others who work in "practical" fields that call for "everyday problem-solving skills." They describe ways that "practical intelligence" differs from "academic" intelligence (Sternberg, 1985; Sternberg & Wagner, 1986, 1994. See also Rose, 2004, on the expertise of waitresses and other keen strategists). Though debates rage about different kinds of "intelligence," most scholars agree that identity as a successful individual in chosen pursuits rests solidly on: (1) observation and purposeful seeking out of experts as sources (through apprenticeship, lectures, readings, or video materials); (2) creation of one's own strategies in problem solving; and (3) persistence in self-assessment and goal-setting. (Sometimes, but by no means in the majority of cases, expertise also includes verbal explanation of just how to become or to work as an expert with a certain skill or knowledge subset.)

The scientist and philosopher Michael Polanyi (1966/1983) called these particular combinations of ways of knowing *tacit knowledge*—both unconscious and inexpressible. Though this term has been applied to many everyday behaviors, Polanyi himself focused on certain kinds of achievement, such as bicycling or juggling. Every cyclist and juggler talks about what he or she does, how the skills came about, and how they are practiced and altered. But full explanations in mathematical, cognitive, or even social terms can never explain what is "really" learned. Experts often sum up their process of achievement by advising: "Just do it, enjoy it, and be willing to work at it."

But mastering expertise takes more than any verbal explanation can capture. Patterns develop deep in our muscles and memory. Serious practice, deep thinking, and mental imagining help us remember and build from actions and interactions that seem to be "in" our bodies. Finger-tapping on a desk by a

planist is not embodied in quite the same way as the impatient tapping of a customer at a service desk. Much that we learn is embodied learning (Dourish, 2001; Pfeifer & Bongard, 2007). Roger the juggler refers to this as "muscle memory."

Molly, the ethnographer who studied Roger, wanted to describe and analyze the behaviors that came together around his self-conscious expertise. She observed his actions and listened to how his talk reflected "regularities in the patterns of symbolic structure that we present to one another" (Hutchins, 1995, p. 370). She wanted to understand how Roger's uses of verbal language and other modalities related to how he learned his skills and sense of identity as a juggler.

Groups in Identity-Making

Ethnographers who study groups who make and sustain their identities draw on methods that go beyond those Molly used to study Roger as an individual working to achieve expertise. A prime example of a group comes from anthropologist Edwin Hutchins (1995) in his studies of ship navigation in the San Diego harbor. (For a similar study, carried out much earlier in the South Seas, see Gladwin, 1970, who studied the natives of Puluwat who sail canoes without instruments over expanses of the Pacific Ocean.) Hutchins analyzes individual introspection; the distribution among members of the group of formal manipulations of numbers, symbols, and lines on charts; and on-the-spot communication as well as later reflections by participants. He looks at how paths of learning work together as the seamen navigate ships into harbor, often under unpredictable traffic and weather conditions. Only with group coordination of the distributed intelligence of these navigators and ship captains and crew can ships enter the harbor safely.

Hutchins (1995) goes beyond the individual to capture the adaptive and ongoing learning behind and within the "everyday" maneuvers of ship crews and navigators. He lets us in on what the term "expert system" means. Certainly, much expertise lies in the artifacts, but what actually happens results

from "the system of person-in-interaction-with-technology." He reminds us that "tools permit the people using them to do the tasks that need to be done while doing the kinds of things that people are good at: recognizing patterns, modeling simple dynamics of the world, and manipulating objects in the environment" (p. 155).

Every ethnographer who sets out to study one or more groups works in the shadow of earlier representations of similar groups or situations. We sense these shadows most when we study groups, such as cultural communities, organizations, and sports teams, whose public identities carry social, political, and economic weight. Even within these groups, members recall and present themselves through selective and ever-changing memories. Identities shift as group members both sustain old habits and values and invent new ways to relate, display, and transmit who they are and how they came to be as well as what they see themselves becoming.

Members see themselves as "belonging" to a group with definable characteristics they refer to as "our culture." Members sustain themselves through learning to be and to work together, knowing that their representation to the outside world depends on how effectively they create and maintain their identity. As noted earlier, much of this "public culture" may be prescriptive, while the ethnographer's job is descriptive and analytical. As entities, limited spatially, by affinity, or through self-assigned membership, these groups may include villages or neighborhoods or even large closely knit families and community organizations—what Holland, Skinner, Lachiotte, and Cain (1998) refer to as "figured worlds."

As noted earlier, individuals, institutions, organizations and social groupings (such as villages or small towns) can purposefully attempt to alter their public representation of themselves even when internal values and behaviors may not have changed in significant ways. Consider, for example, multinational oil companies that have been involved in widely reported oil spills. In the 1990s, advertisements of several of these companies shifted away from pictures of cars

and airplanes or oil rigs and graphs and charts of company achievements and profits. Instead, advertisements in magazines carried a single photograph of a dove in flight plus printed text telling a story about the value of nature's symbols for reminding us of the beauty of the earth. Readers had to consciously search to locate the name of the oil company in tiny print at the bottom of the page. This seemingly small change was followed within a decade by the inclusion in magazines of advertising sections that represent themselves as "news," "human interest stories," or "environmental moral tales." Through these changes of self-representation, corporations try to shed their "black" image for a "green" one.

We need to look closely and think consciously to distinguish group-identity advertisements from news or feature articles that report on actions by these groups. As corporate identities insert themselves more and more "ordinarily" into everyday scenes, the public (sometimes helped by ethnographers; see Chapter 6) needs to attend not only to what these advertisers portray as their group "cultures" but also to what their groups actually do and value.

An additional issue that often draws ethnographers' attention is the matter of how groups change over time without recognizing that they do so. As noted earlier, the dynamism of cultural lives comes, more often than not, primarily through nearly imperceptible shifts in actions, collective memories, and signs and systems of symbols.

How we draw in the sand, signal distress, or sense the way the wind is blowing depends on collections of signs that make meanings that surpass, supplement, and even contradict what may be reported by insiders as unchanged and unchanging. For example, in the central desert of Australia, telling stories while drawing in the sand is an age-old cultural practice (Eickelkamp, 1999; Kral, 2007). Stories in this context have long centered on ancient tales, hunting and gathering practices, and family and land connections. In the past three decades, rapid and far-reaching disruptions of these traditional patterns have come with settlement of kin groups into communities

dependent on public monies. Today elders rarely create these stories, and the stories that children illustrate in the sand tell of contemporary interpersonal stress and family tensions.

Yet elders report that the old sand-stories are still alive, but children "know different," for their sense of what is "alive" is not the same as that of their parents and grandparents. In other words, the elders see the children as continuing the ancient practice of storytelling and sand-drawing and therefore believe "the tradition" remains. Yet the substance and message of the practice have changed as well as the primary practitioners, as Kral (2007) demonstrates in her accounts of how Aboriginal children use new media technologies to tell their stories. Within every group, ethnographers and close observers find contradictions between what is believed and expressed and what is actually done and is often inexpressible. Ethnographers have to recognize and document both.

Institutions of Formal Education

From sites of formal schooling, ethnographers most often choose classrooms as their entity of focus. Here learners come together not by self-chosen expertise goals or small-group identity but by external assignment. Direct instruction by a designated expert comes primarily through oral language with substantial reinforcement from specialized artifacts, such as textbooks, worksheets, whiteboards, and tests. Ethnographers who study classrooms note the range of symbol systems that support and often define specific zones of time and place, such as literacy hour or reading circle. Ethnographers capture instructor-sanctioned events of students as well as moments when learners play out their self-assigned roles, such as bully, class clown, or geek. Ethnographers attend also to the non-members who come and go in classrooms (parents, students from other classrooms, and volunteers). The manner and content of how these outsiders get introduced, take part, and present themselves matter to ethnographers (Bloome, Carter, Christian, Otto, & Shuart-Faris, 2005).

Since the 1990s, classrooms have become the most frequently researched site of ethnographers. Yet classrooms, like all sanctioned sites of formal education, receive their identities, spaces, times, and instructional goals primarily from power sources beyond local participants. Pace, methods, and artifacts for display of skills and information, as well as standards of achievement (rarely referred to as "expertise"), derive from core parameters of formal education (e.g., time, space, and role specifications).

We consider here ways that historical and political forces behind these parameters determine language, modalities, and norms of use for institutions of formal education. It is these to which the ethnographer must attend, not just the immediate "face-to-face" observables. These external impositions dictate means and levels of learning. Formal education systems in all societies are tightly bound to either religion or the state or, in some cases, to both. Institutions of religion and government depend on permanent written records of their authority and achievements. Archival records and sacred texts of state and religious powers lie behind control of daily activities and transmission of belief systems. Consider the Magna Carta, the Declaration of Independence, the Constitution of Australia, the Quoran, and the Bible.

A bit of history helps here. When formal education systems came into being as instruments of government, sanctioned and preferred ways of using written language came along with explicit instruction of bodies of knowledge.³ Whether simply for receptive use (such as reading and reciting only) or in productive functions (such as writing and illustrating through elaboration of certain elements of a script), written language evolved at a rapid pace, becoming the ultimate tool of power for formal education systems linked to the state. Yet until the beginning of the 18th century in Europe, even within higher education institutions, oratory, oral deliberation, and dramatic performance also carried considerable power. People identified political and religious leaders by their oral skills (Vincent, 1989).

Nevertheless, by the end of the 18th century, literacy had taken hold across much of North America, as well as in England, and perhaps to a lesser extent in Europe (Olson, 1977). Formal education systems now looked to reading and writing as key marks of individual power and status. Even leisure time came to be linked with the ability to read. Public libraries, newspaper distribution, and publication of fiction and poetry spread rapidly. Conversation manuals often promoted reading in leisure time to stimulate verbal depth and dexterity. During this period, museums also began to capture those members of society who had leisure time, and every visit fed curiosity about distant places as well as awareness of contemporary breakthroughs in cartography and botanical and anatomical illustration. Print became ubiquitous. Notions of "standard," "official," or "state languages" evolved in close association with the importance of formal education and achievement by individuals of the status of "literate."

This brief history tells us a great deal about the underlying valuations of written languages. Individuals who cannot use the "official" languages or standard varieties of their countries or write that language in "standard" form have beliefs about language and literacy that affect their perceptions of themselves. Therefore, even when the arm of formal education has not directly reached such individuals, the influence of the authoritative status that formal schooling gives written language or a particular "standard" form of language extends far into and deep within a nation.

Moreover, chosen uses and forms of language have through the past two centuries increasingly become synonymous with learning and achievement in general. An individual is considered "learned" or well educated if he or she speaks a particular form of language, can read and write the correlate of that form according to prescribed conventions, and knows how to use particular oral and written language forms together to wield power. In addition, one's language uses portray a breadth of sanctioned experiences that can add up to being labeled "cosmopolitan," "a citizen of the world," or "well rounded."

What are the implications of all of this for ethnography? Rigorous research distinguishes linguistic or literate skills and knowledge associated with institutions of formal education from processes of learning that individuals and groups develop in their own expertise and identity-making. The latter kinds of learning can be interdependent with school-sanctioned language and modes, but often individual and group expertise passes unnoted and unvalued. This is especially the case for wisdom and experience valued in cultural communities easily pushed to the side in favor of "advanced" technologies. Consider, for example, the long-standing botanical/medical knowledge local healers of rural areas and indigenous groups hold in various parts of the world.

Formal education, viewed as a unified program of change planned and organized by the norms and ideologies of groups in power, opens endless opportunities for ethnographers to ask about how learning is displayed and valued in relation to different combinations of multimodalities. We note below a few starting points for looking deep inside language, literacy, and multimodalities in classrooms. In each case, we note the need to set spatial and temporal boundaries when seeking the answer to questions.

Ethnographers can examine learning across language, literacy, and multimodalities in myriad ways, including the following:

1. *Describe and contrast student and teacher talk about textbook content.*

Possible key questions: To what extent do teachers and students balance their talk about information gained from printed texts as distinct from other illustrative materials? How do assessments of students reflect a balance, and which patterns of language structures and uses receive the most positive valuations of student knowledge of textbook content?

2. *Describe and contrast classroom language in a related subject area (e.g., English, science, etc.) with the interactive talk of adults and*

young learners preparing for an event such as a school drama or community recycling campaign.

Possible key questions: What will speakers' vocabulary, syntax, genres, reference points, and interruptions of one another look like in these contrastive situations? How do participants themselves describe any differences they see in their language uses in classrooms and in after-school organized activities? What do they believe influences these differences?

3. Describe and contrast ways in which primary teachers call upon representational schema to teach pupils about time, space, and so on.

Possible key questions: What are the differences between digital and analog representations of time (e.g., 24-hour digital clocks/12-hour circular clock faces)? What are the "affordances" of each type? How do school practices relate to those that pupils are familiar with in their everyday lives (e.g., video recording or bus timetable layouts that use different representations of time)?

Signs and symbols are not "innocent" (cf. Bourdieu, 1991; Bourdieu & Passeron, 1977). A broad effort for ethnographers of classrooms should go to identifying conventions that students learn that parallel (and often originate from) those of "real" life. Consider, for example, conventions surrounding plagiarism and legal constraints behind the need to credit sources within textbooks and documentary films. Textbook publishers cannot simply take an illustration or photograph from another source without securing and citing permission. Documentary filmmakers cannot, without permission, lift portions of graphs or charts from newspapers or sections of earlier films or even "amateur" digital recordings without facing legal repercussions. Every ethnographer studying the production, reception, and uses of these multimodal literacies sees in these artifacts the representation of the prohibition against plagiarism. Students are admonished not to plagiarize, but they rarely understand this warning in the context of the legal issues that publishers and filmmakers face.

In essence, every student, textbook writer, and filmmaker is expected to learn certain conventions of attribution to ensure "credit" for direct copying. Students who do "research papers" must learn the conventions of punctuating quotations, footnoting, citing references, and offering acknowledgments. All conventions, many far less obvious than those noted here, lend themselves to scrutiny by ethnographers who want to understand hidden and overt expectations in the "culture" of classrooms. Many conventions and norms find representation primarily through admonition against unsanctioned practices rather than through sustained explication and consideration in terms of their origins or comparative contexts and purposes.

Educational systems in particular (and Western societies more broadly) are often criticized for overemphasizing the significance of writing and speech as the central salient modes of representation (Kress & Van Leeuwen, 2001). Yet artifacts within schools and other formal institutions and organizations depend on illustrations of a wide variety of types. We turn now to multimodalities and ways to define and identify these even in the midst of dominant language and literacy forms in schools.

MULTIMODALITIES

A primary job of ethnographers is to track, describe, and enumerate multimodalities as *semiotic* resources in their combinations—linguistic, gestural, kinesthetic, and visual (Kress & Van Leeuwen, 1996, 2001). Modes, socially learned and displayed, support individuals, groups, and institutions as they gain and sustain expertise and identity (e.g., as computer geek or graffiti artist; as dance troupe or football team; as kindergarten or business school). When ethnographers study any of the three situations of life-span learning noted above, they see systems of arrangement not only within each mode but in ways modes work together.

We use the term *multimodal literacies* to refer to those events and practices in which the written mode is still salient,

yet embedded in other modes. These can initially be observed most readily within situations in which some agent, organization, or institution wants to transmit information, build skills, change attitudes, entertain, or accomplish all of these goals at the same time.

Think, for example, of contemporary “classic” comic books, narrative television advertisements, or a magazine such as *Adbuster* (published in Canada). This magazine plays off inside knowledge of the advertising and marketing worlds to show what is happening in the “mental environment” of consumers. A variety of modes are called upon to do this work, written modes being embedded in such features of visual mode as color, layout, and so on. Usual conventions or genres (such as advertisement, editorial, or exposition) of printed texts are not immediately obvious to first-time readers of this magazine. Each new reader of *Adbuster* has to learn how to read against conventions of prior expectations in order to figure out the parodic intent of the subtext of the magazine. Back cover and front cover look “alike” in gross format, but the two generally contradict each other. The front cover announces the “culture of life” while the back cover proclaims the “culture of death.” The magazine is printed right side up for one-half of the inside text pages and in reverse for the other half. Several languages cut in and out of the pages in every issue. Close scrutiny of almost any page reveals that what seems familiar is strange.

Though not so ideologically “out front” as *Adbuster*, science textbooks in formal education systems carry similar instances in which texts and images cross-reference other sources of information, such as scientific report, newspaper, recipe book, or pamphlet from the family dentist (cf. Jewitt, 2006). In science textbooks, written language comes along with graphs, charts, schematic drawings, and photographs. These work together in (sometimes) systematic ways within sections of textbooks and across textbooks as a whole. In many cases, certain patterns of arrangements of the multiple modes used within any single text are echoed in other volumes in a series. For example, laboratory manuals pick up patterns used in accompanying

textbooks and also represent actual hands-on work through diagrams and step-by-step illustrations.

Consider another detail that matters in terms of presuppositions that teachers, textbook makers, and test developers make about students’ uses of printed text and illustrations. Think here especially of the difficulties that non-native speakers face in reading a science textbook in a classroom full of unfamiliar and unexplained conventions. In science textbooks, captions that accompany illustrations only sometimes relate to the written text. Some echo the fuller printed text with synonyms, while some explode into analogical comparison. Some illustrations “count” as carrying information to be remembered or to note as exemplary of points made in the written text. Other illustrations may only be fillers to “lighten” the weight of the detailed material presented in print. A biology textbook may on the same double-page spread include schematic drawings labeled “Figure 10a, 10b,” and so on, with reference to these figures within the printed text. Yet on the same page, a photograph may appear with no caption or text reference. Readers are somehow expected to figure out on their own the relevance of visual materials to the broader arguments of the printed text. Presuppositions about learners’ abilities to “see” connections and to add meaning underlie ways that producers of multimodal materials combine these resources (cf. Kress & Van Leeuwen, 2001, pp. 21–22). These presuppositions generally reflect cultural expectations of what “should” or “did” happen in language socialization long before the in-school learner ever met a science textbook (see Chapter 5 for more on language socialization).

A social semiotic theory of multimodalities pushes ethnographers to take an interest in “the social place, the history and formation of the sign-makers, and in the social environments in which they make their signs” (Kress & Street, 2006, p. viii). Ethnographers unpack and explicate both general and specific multimodalities as they look beyond the immediate situation to broad forces that create learning environments and their artifacts (see Scribner & Cole, 1981, for a classic study of

"looking beyond" the immediate production of particular forms and functions of literacy). We have many affordances or possibilities of machine and human in meaning-making within the "borderless flows of data, information and image that characterise information economies" (Luke & Carrington, 2002, p. 247). Therefore, we must continuously update, refine, and expand methods of data collection and data analysis. We also have to reappraise given theories and develop new theories of explanation for events and practices, meanings and representations, on which actors call as they do their work of meaning-making in multiple situations of learning.

SUMMARY

As Roger talks about how he learned to juggle and how he now sometimes tries to help others learn, Molly, his ethnographer, makes an inventory of all his modes of learning. She also observes Roger in practice, listens when he talks to others about his latest adventure in juggling, and watches him sit silently in a coffee shop, tossing small wads of paper from hand to hand. Molly notes not only the types of oral and written language Roger uses but also other modalities on which he draws. As anthropologist Judith Okely (1983) suggests in her ethnography of traveller gypsies in the United Kingdom: "Verbalisation is only one among other sources of meaning . . . gestures, positionings and silences in their contexts, all clues for a composite understanding" (p. 45).

In subsequent chapters, as we work toward "a composite understanding" of Roger as a juggler, we return to both Molly and Roger. At this point, however, we pull together just those means of information input and skill development that we heard Roger talk about in the opening of this chapter. In these few quotations, Roger tells Molly that he does the following:

1. He observes an intimate—a friend—and is motivated to try juggling, a "cool thing."
2. He reads about juggling.

3. He continues to observe others, try on his own, and self-assess and reflect on how he thinks he is doing. He acknowledges that much of his learning comes "just by trial and error."
4. He senses that he is feeling and embodying "the obvious" through his continued practice; he gains "muscle memory."
5. He creates and devises his own ways to practice and to learn effectively. He figures out the value of throwing the balls higher. He devises a way to use a wall to help him keep control of the balls. He acknowledges that he comes to feel "I could get on it [the ineluctable sense of control of the balls] well, standing with a wall next to me."
6. He comes to know "what it feels like" through emulating others in their juggling.

We have all watched jugglers, marveling at their dexterity and ability to make what they do look easy. We can see juggling as analogous to undertaking ethnography in the study of language and literacy. In the chapters ahead, we stay with the idea of juggling as we specify practices and principles of ethnography.

NOTES

1. Throughout this volume, the ethnographic work of Molly Mills in studying Roger (a pseudonym) is used with permission. We acknowledge with gratitude Molly's willingness to provide not only transcripts of her digital sound recordings of Roger but also insights into her own processes as a young social scientist exploring for the first time how to work and think as an ethnographer studying learning with particular attention to uses of oral language and other modalities. Molly carried out her study of Roger through observations, informal conversations, and interviews conducted between September and December 2006. She did her ethnographic work to fulfill a requirement for an Anthropology of Education course taught by Shirley at Brown University.

2. Our conventions related to use of quotation marks and italicized words denote a central dilemma within the social sciences. Many of the concepts and methods that these disciplines regard as belonging to *research* have widespread usage in popular journalism and the

creative arts (see Chapter 6 for more discussion on this point). In this volume, when we refer to words and phrases drawn from these broad popular and often everyday uses, we use quotation marks. When we use words or phrases that carry specific technical meanings within the social science disciplines, we italicize these so that they will stand out within the text as a whole. We generally italicize these terms only upon their first appearance within each chapter or when we want to emphasize the technical research-based meaning of the term.

3. Theories of structures of formal schooling, involvement of state systems, and conflicts between overt and hidden curricula come from scholars, such as Pierre Bourdieu, Suzanne deCastell, Henry Giroux, Herve Varenne, Raymond McDermott, Peter McLaren, and Hugh Mehan. "Critical literacy" studies share theoretical starting points with scholars who extend their work beyond the institutions of schooling to governmental bureaucracy, employment opportunities, and medical service delivery. A notable difference, however, lies in the fact that the work of critical literacy scholars centers on distinctions between "Discourse" (sharing much in definition with "Culture" but focusing on signs and symbols) and "discourse" (defined in its ordinary usage as a stretch of units of language). Major figures within critical literacy include James Gee, Colin Lankshear, and those within the New London Group, including Courtney Cazden, Allen Luke, Brian Street, and others. Intellectual histories of these groups may be found in Cope & Kalantzis, 2000; Gee, 1990/1996, 2000; Gee, Hull, & Lankshear, 1996; Hull & Schultz, 2002; Lankshear, 1997; Lankshear & Knobel, 2003; New London Group, 1996; Street, 1993a.